

Appl'n. No. 09/612,982
Response dated June 18, 2004
Reply to Office Action of Dec. 31, 2003

REMARKS/ARGUMENTS

I. Introduction

Applicant thanks the examiner for his careful examination of the present application. Below is a summary of Applicants understanding of the present application.

1. Claims 1-19 remain in this application.
2. Claims 1 and 13 are the only independent claims under review.
3. Claim 17 is currently amended.
4. Claims 17 stands rejected under 35 U.S.C. § 112.
5. Claims 1-19 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Sims, III (U.S. Patent No. 6,438,235 hereinafter Sims) and Eldridge et al. (U.S. Patent No. 6,094,721 hereinafter Eldridge) in view of de Silva et al. (U.S. Patent No. 6,615,347 hereinafter de Silva).
6. The following prior art which was made of record and not relied upon, is considered by the examiner to be pertinent to applicant's disclosure.
 - Cruse et al. (U.S. Patent No. 6,398,245)
 - Hurtado et al. (U.S. Patent No. 6,418,421)
 - Sudia et al. (U.S. Patent No. 5,825,880)
 - Shimizu et al. (U.S. Patent No. 6,085,323)

II. 35 U.S.C. § 112 Claim Rejection

Claims 17 stands rejected under 35 U.S.C. § 112.

Claim 17 was amended to correct an antecedent basis problem. Original Claim 17 recited the limitation "said set top box records" in line 1. However, there was insufficient antecedent basis for this limitation in the claim. Therefore, Claim 17 was amended to replace the term "set top box" with "trusted device." The antecedent basis for "trusted device" may be found in Claim 14, from which Claim 17 depends. Support for this amendment may be found in Figure 2. Because Claim 17 as amended has proper antecedent basis, withdrawal of this rejection is respectfully solicited.

III. 35 U.S.C. § 103(a) Claim Rejections

A. Claims 1 through 19

Claims 1-19 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Sims and Eldridge et al. in view of de Silva et al.

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Sims focuses on protecting content, and restricting its use to authorized devices. Specifically, Sims is concerned with allowing anyone to publish protected content to the same set of devices, without compromising those devices or other publishers' content.

Eldridge focuses on maintaining synchrony between user-friendly passwords and cryptographic keys, so users on a computer network can reliably access centralized services through their client machines. The server must be able to reliably move to a new password, without denying service to the client.

De Silva is concerned with certifying the relationship between two different public keys, for example for updating keys. This reference discloses that this may be done by binding the two different public keys together using the signature key of a certifying authority.

The present invention discloses a method and apparatus for manufacturing trusted devices. It is not concerned with protecting content, with passwords and client/server computing, nor with the relationship between two public keys. It is concerned with the manufacture of the trusted devices themselves and reducing the trust that the licensor of such devices needs to place in the manufacturer of these devices. This has at least two aspects: First, the manufacturer cannot produce units of the trusted device without the consent of the licensor, so the manufacturer is accountable to the licensor for precisely the number of units he manufactures. Second, although the manufacturer gets keys from the licensor to allow him to manufacture devices, the manufacturer does not learn the keys that the device will use in its operation, so the licensor is not dependent on the manufacturer for the security of those "operating keys." Thirdly, this is all accomplished using one-way batch data flows, so the licensor can place an order for a number of devices, and the manufacturer can manufacture these devices without ongoing communication between the manufacturer and the licensor. These aspects are achieved by having a licensing authority provide keying information to a manufacturer that inserts the keying information into trusted devices. The trusted devices generate final private and public keys using the keying information. The manufacturer then generates a binding certificate for the trusted device using the final public key. Therefore, because neither Eldridge, Sims nor de Silva, either separately or in combination disclose the method and apparatus for manufacturing trusted devices claimed in the present application, withdrawal of the rejections is respectfully requested.

B. Claim 1

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Applicant agrees with the examiner that Sims "discloses a method for protection of content stored in a trusted device." (Office Action, Paper 4, page 2 para. 4). However, the present invention discloses "a method of manufacturing a trusted device." (Claim1) Specifically, the examiner relies on Sims to disclose the step of: "(a) receiving keying information from a manufacturer, said manufacturer having received said keying information from a licensing authority." (see Sims, col. 2, lines 44-62). This limitation, interpreted in light of the entire claim, requires that the keying information is used to generate a certificate for credentialing a trusted device and not used for the protection of content stored in a trusted device. However, Sims discloses using public keys not to credential a trusted device, but to encrypt/decrypt content stored on media. (Sims col. 4, lines 61-63). Therefore, because Sims does not disclose keying information that is used in generating a binding certificate for a trusted device, withdrawal of this rejection is respectfully requested.

The examiner cites "secure[ing] server processes to defeat unauthorized use[s] of a client profile" as a motivation to modify Sims with Eldridge (Office Action, Paper 4, page 3 para. 4; Eldridge, col. 1, lines 49-54). However, there is no motivation to look at Eldridge to modify Sims because Eldridge and Sims disclose unrelated inventions. Eldridge relates to "data processing systems" and Sims "relates to protection of content stored on bulk storage media." (See Eldridge, col. 1, lines 15-18; see also Sims, col. 1, lines 5-6) Therefore, because there is insufficient motivation to modify Sims with Eldridge, withdrawal of this rejection is respectfully requested.

The de Silva reference does not disclose the claim limitations cited by the examiner. The teachings in the de Silva reference regarding the acquisition of a certificate are different from the present invention. The de Silva reference discloses sending a public key to a certification authority and receiving a binding certificate from said authority. (See de Silva, col. 3, lines 25-35). However, the present invention uses three distinct elements in generating a binding trusted device certificate: a licensing authority, a manufacturer and a trusted device. The licensing authority provides the keying information, but the trusted device sends the final public key to the manufacturer for a certificate, NOT the licensing authority. Therefore, because the final public key is sent to a manufacturer instead of a certification authority, withdrawal of this rejection is respectfully requested.

The examiner cites col. 1, lines 45 - 47 of de Silva as motivation to modify Sims with de Silva. Those lines state that "[o]ne purpose of the digital certificate is to document in a trustworthy manner that the public key is associated with the subscriber." However, there is no motivation to look at de Silva to modify Sims because de Silva and Sims disclose unrelated

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inventions. The de Silva reference relates to a "security infrastructure for on-line transactions" and Sims "relates to protection of content stored on bulk storage media." (See de Silva, col. 1, lines 9-10; see also Sims, col. 1, lines 5-6) Therefore, because the problems facing an inventor of security for bulk storage media would have been different than the problems facing an inventor of online transactions, one skilled in the art at the time of the present invention would have insufficient motivation to consider de Silva to modify Sims, withdrawal of this rejection is respectfully requested.

C. Claims 2 and 3

Because of at least the reason stated above, applicant now believes that independent claim 1 is now in condition for allowance. Therefore, the current rejections of Claims 2 and 3 are improper because they both depend upon allowable independent Claim 1. "All words in a claim must be considered in judging the patentability of that claim against the prior art." In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970); MPEP § 2143.03. "If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious." In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988). Because Claims 2 and 3 ultimately depend upon independent Claim 1, the rejections of claims 2 and 3 are improper. Consequently, in light of independent claim 1, withdrawal of these rejections is respectfully solicited.

D. Claim 4

The de Silva reference does not disclose the claim limitations of computing an evidentiary certificate. The de Silva reference discloses only one digital certificate. Specifically, the paragraph cited by the examiner merely describes possible components of the singular digital certificate. The evidentiary certificate of the present invention is a new certificate separate from the binding certificate. Therefore, because the de Silva reference does not disclose the step of computing an evidentiary certificate, withdrawal of this rejection is respectfully requested.

E. Claims 5 through 12

Because of at least the reason stated above, applicant now believes that independent claim 1 and dependent claim 4 are now in condition for allowance. Therefore, the current rejections of Claims 5 through 12 are improper because they both depend upon allowable dependent Claim 4 and ultimately independent claim 1. Consequently, withdrawal of these rejections is respectfully solicited.

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F. Claim 13

Applicant disagrees with the examiner that Sims “discloses an apparatus for manufacturing trusted devices.” (Office Action, Paper 4, page 7 para. 3). Specifically, the examiner relies on Sims to disclose: “(a) a licensing authority for providing keying information; (b) a multitude of manufactures, each of said manufactures receiving keying information from the licensing authority; and (c) a multitude of trusted devices, each of said trusted devices receiving keying information from one of said multitude of manufacturers.” This limitation, interpreted in light of the entire claim, requires that the keying information is used to generate a certificate for credentialing a trusted device and not used for the protection of content stored in a trusted device. However, Sims discloses using public keys not to credential a trusted device, but to encrypt/decrypt content stored on media. (Sims col. 4, lines 61-63). Therefore, because Sims does not disclose keying information that is used in generating a binding certificate for a trusted device, withdrawal of this rejection is respectfully requested.

The examiner cites “secure[ing] server processes to defeat unauthorized use[s] of a client profile” as a motivation to modify Sims with Eldridge (Office Action, Paper 4, page 3 paragraph 4; Eldridge, col. 1, lines 49-54). However, there is no motivation to look at Eldridge to modify Sims because Eldridge and Sims disclose unrelated inventions. Eldridge relates to “data processing systems” and Sims “relates to protection of content stored on bulk storage media.” Therefore, because there is insufficient motivation to modify Sims with Eldridge, withdrawal of this rejection is respectfully requested.

The de Silva reference does not disclose the claim limitations cited by the examiner. The teachings in the de Silva reference regarding the acquisition of a certificate are different from the present invention. The de Silva reference discloses sending a public key to a certification authority and receiving a binding certificate from said authority. (see de Silva, col. 3, lines 25-35). However, the present invention uses three distinct elements in generating a binding trusted device certificate: a licensing authority, a manufacturer and a trusted device. The licensing authority provides the keying information, but the trusted device sends the final public key to the manufacturer for a certificate, NOT the licensing authority. Therefore, because the final public key is sent to a manufacturer instead of a certification authority, withdrawal of this rejection is respectfully requested.

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G. Claim 14

The Sims reference does not disclose a licensing authority that includes a database. The section of Sims referenced by the examiner discloses that a “list of ‘acceptable users’” is contained along with content on media, NOT in a licensing authority (see Sims, col. 14, lines 35-39). Further, because there is no written basis to equate “acceptable users” with “trusted devices,” applicant disagrees that a list of ‘acceptable users’ is a database of trusted devices. Because the Sims reference does not disclose “trusted device records” residing in a licensing authority, withdrawal of this rejection is respectfully requested.

H. Claims 15 through 19

Because of at least the reason stated above, applicant now believes that independent claim 13 and dependent claim 14 are now in condition for allowance. Therefore, the current rejections of Claims 15 through 19 are improper because they both depend upon allowable dependent claim 14 and ultimately independent claim 13. Consequently, withdrawal of these rejections is respectfully solicited.

D. The remaining prior art references made of record

Applicant would like to thank the examiner for his consideration of the following United States Patents that were made of record but not relied upon by the examiner:

US-6,398,245 to Gruise et al.;
US-6,418,421 to Hurtado et al.;
US-5,825,880 to Sudia et al.; and
US-6,085,323 to Shimizu et al.

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It is believed by the applicant that none of these patents, either separately or in combination, disclose keying information that is used in generating a binding certificate for a trusted device and therefore do not anticipate the present application.

IV. Conclusion

For all of the reasons advanced above, Applicant respectfully submits that the application is in condition for allowance and that action is respectfully solicited. If there are any outstanding issues that might be resolved by an interview or an Examiner's amendment, the Examiner is requested to call Applicant's agent at the telephone number shown below.

The Commissioner is hereby authorized to charge any additional fees, which may be required, or credit any overpayment, to Deposit Account No. 501450.

Respectfully submitted,



David Grossman
Registration No. 42,609

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David Grossman
1408 Bayshire Lane
Herndon, VA 20170
(703) 338-6333